

Customer No.: 31561
Docket No.: 9747-US-PA
Application No.: 10/065,566

REMARKS

In the Office Action, claims 1-5, 7, 8, 10, 12-16, 18-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya et al (USPN 6,583,775; hereinafter "Sekiya") in view of Shigeta (USPN 6,091,385; hereinafter "Shigeta").

The Office Action has further rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Shigeta and Hack et al. (USPAP 2002/0030647; hereinafter "Hack").

The Office Action has further rejected claims 6, 9, and 17 under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Shigeta and Filliman (USPN 5,255,220; hereinafter "Filliman").

In response thereto, and for clearly defining the invention, Applicant has amended claims 12 and 24 and newly added claims 26-35. These amendments are specifically described hereinafter. It is believed that the foregoing amendments add no new matter to the present application. Claims 1-20 and 24-35 are now pending in the application. Favorable reconsideration and allowance of the application and presently-pending claims are respectfully requested.

Interview Summary

The undersigned would like to thank Examiner Fatahiyar for granting a telephonic interview on August 13, 2007, during which the 35 U.S.C. 103(a) rejections were discussed. More particularly, the undersigned and the examiner discussed the inappropriateness of the

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Sekiya reference since Sekiya teaches the TFT3 is being coupled to the gate of TFTs, rather than to a point between the light-emitting device driving unit and the light-emitting diode. Unfortunately, the examiner maintained only claims 24 is allowable and no further agreement was reached during this interview.

Discussion of Office Action Rejections

Claims 1-5, 7, 8, 10, 12-16, 18-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Shigeta.

In response thereto, Applicant hereby otherwise traverses these rejections and submits that the claimed features as set forth in claims 1-5, 7, 8, 10, 12-16, 18-20 and 24-25 are neither taught, disclosed, nor suggested by Sekiya, Shigeta, or any of the other cited references, taken alone or in combination, and thus should be allowed.

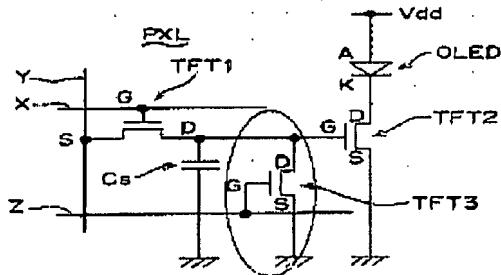
Claim 1 recites “[a] driving circuit for a display device having a plurality of pixels, wherein the driving circuit is used for driving a light-emitting diode in each pixel, the driving circuit comprising: a light-emitting device driving unit, coupled to the light-emitting diode, for providing a driving current to the light-emitting diode selectively; and a discharging unit, coupled to a point between the light-emitting device driving unit and the light-emitting diode, for discharging the light-emitting diode according to a voltage level of a control signal.”

First, it is noted that the Examiner had already interpreted TFT2 of Sekiya as a light-emitting device driving unit, and the OLED as a light-emitting device (light-emitting diode).

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In this manner, TFT3 which is also interpreted by the Examiner as reading on the discharging unit does not satisfy the limitation of “**a discharging unit, coupled to a point between the light-emitting device driving unit and the light-emitting diode ...**” Instead, TFT3 of Sekiya is coupled to the gate of TFT2. The items are disclosed in Figs. 1 of Sekiya as provided below.

FIG. 1



As shown in Fig. 1 of Sekiya, it is clearly illustrated that neither TFT3 nor any other discharging unit is coupled to a point between the light-emitting device driving unit (TFT2) and the light-emitting diode (OLED). Sekiya neither teaches nor discloses the technical feature “**a discharging unit, coupled to a point between the light-emitting device driving unit and the light-emitting diode ...**” as highlighted in the above-referenced claim 1 of the present invention.

Second, the Examiner cited Shigeta as a secondary reference in proving that “it is well known to charge or discharge (64 and 66 respectively) a light emitting element (78)”.

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Sekiya and Shigeta belong to different display technology fields. Sekiya is directed to an OLED display device, but Shigeta relates to a plasma display device. In col.1, lines 5~8, Shigeta discloses that “[T]he present invention relates to an integrated circuit for driving a flat display device, and in particular to such an integrated circuit that drives a plasma display panel used as a large-sized flat display device.” Therefore, Shigeta is directed to an IC for driving a plasma display panel.

In addition, in col.1, lines 14~19, Shigeta discloses that “[In a plasma display panel for a television, for example, discharge cells are provided between vertical arrays of electrodes and lateral arrays of electrodes, and images are formed by turning on/off the discharge cells for gas discharge at intersections of the electrodes corresponding to selected display pixels.”

Moreover, one of ordinary skill in the art may understand that a plasma display emits light via electrical field excited plasma. The xenon and neon gas in a plasma display is contained in hundreds of thousands of tiny cells positioned between two plates of glass. Long electrodes are also sandwiched between the glass plates in front of and behind the cells. The address electrodes sit behind the cells, along the rear glass plate. The transparent display electrodes which are surrounded by an insulating dielectric material and covered by a magnesium oxide protective layer are mounted in front of the cell, along the front glass plate. The electrodes thereof should be charged and discharged in prompting response. Control circuitry charges the electrodes that cross paths at a cell, creating a voltage difference between the front and the back and causing the gas to ionize and form a

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plasma; as the gas ions rush to the electrodes and collide, photons are emitted (reference: http://en.wikipedia.org/wiki/Plasma_display). Such a charging or discharging operation is intrinsic to the principle of operation of the plasma display, and thus provides no suggestion to modify Sekiya at all.

The claimed invention is directed to "a driving circuit ... for driving a light-emitting diode in each pixel". Applicant respectfully disagrees with the allegation made by the Examiner that "it is well known to charge or discharge (64 and 66 respectively) a light emitting element (78)". In Shigeta, the charge or discharge operation is only taught to the driving circuit for plasma display. There is no teaching provided by any of the cited reference that a light-emitting diode in each pixel should be discharged, and thus the combination of Sekiya and Shigeta does not arrive at the present invention.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

At least for the same reasons provided above, Applicant respectfully submits that the combination of Sekiya, Shigeta, or any of the other cited references does not teach or suggest all the claim limitations in Applicant's claim 1, rendering Applicant's claim 1 novel, non-obvious, and allowable.

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

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Accordingly, claims 2-5, 7, 8 and 10 depending upon the allowable independent claim 1 are non-obvious, and thus should also be allowable.

In response to the rejection of claim 12, for at least the same reasons as discussed above to traverse the rejection of claim 1, independent claim 12 should be allowed.

Claims 13-16 depend on the allowable claim 12, and therefore, claims 13-16 should be allowed.

In response to the rejection of claim 18, for at least the same reasons as discussed above to traverse the rejection of claim 1, independent claim 18 should be allowed.

Claims 19 and 20 depend on claim 18, and therefore, claims 19 and 20 should be allowed.

The Office Action has further rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Shigeta and Hack.

In response thereto, Applicant submits that claim 11 depends on the allowable independent claim 1, and thus should also be allowed.

The Office Action has further rejected claims 6, 9 and 17 under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Shigeta and Filliman.

In response thereto, Applicant submits that claims 6 and 9 depend on the allowable independent claim 1, and claim 17 depends on the allowable independent claim 12. Thus, claims 6, 9 and 17 should also be allowed.

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New claims 26-35 are added for more clearly defining the invention.

New independent claim 26 is a claim by incorporating the technical feature of claim 3 into claim 1, and claims 27-35 depend on claim 26, respectively. Therefore, no new matter has been added.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-20 and 24-35 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,

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